



Construction Update

September 12, 2013

Transbay Transit Center

TJPA





Transbay Transit Center

Period Summary

- There was one minor recordable incident this period. An ironworker placing rebar received a cut to his forearm requiring stitches. There were no lost time incidents this period.
- There have been over 835,000 craft hours completed, excluding demolition, through August 31, 2013. Over 45,000 completed since the last meeting.
- Bracing installation is complete in Zones 1 and 2; work continues in Zone 3 and has just begun in Zone 4. In Zone 3 struts are complete at bracing levels A and B, 90% complete at level C, 80% complete at level D. In Zone 4 struts are complete at bracing level A and 30% complete at level B.
- Overall the excavation work is 80% complete.



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Period Summary

- Grounding system installation, geothermal installation and mud slabs are completed in Zone 1.
- 1,259 micropiles have been installed and tested in Zones 1, 2 and part of 3. The micropile work has caught up with the excavation. It is anticipated that the micropile work will commence again in January of 2014.
- Grounding, Geothermal and Mud Slab installation has caught up with the excavation and is complete through Zones 1, 2 and approximately 50% of Zone 3. Work will re-commence in Zones 3 and 4 in February 2014.
- RUP 4.2, the AWSS Work, continued this period. Final re-paving of First and Second Street intersections was completed. Working with DPW to continue work between Main and Beale Streets.



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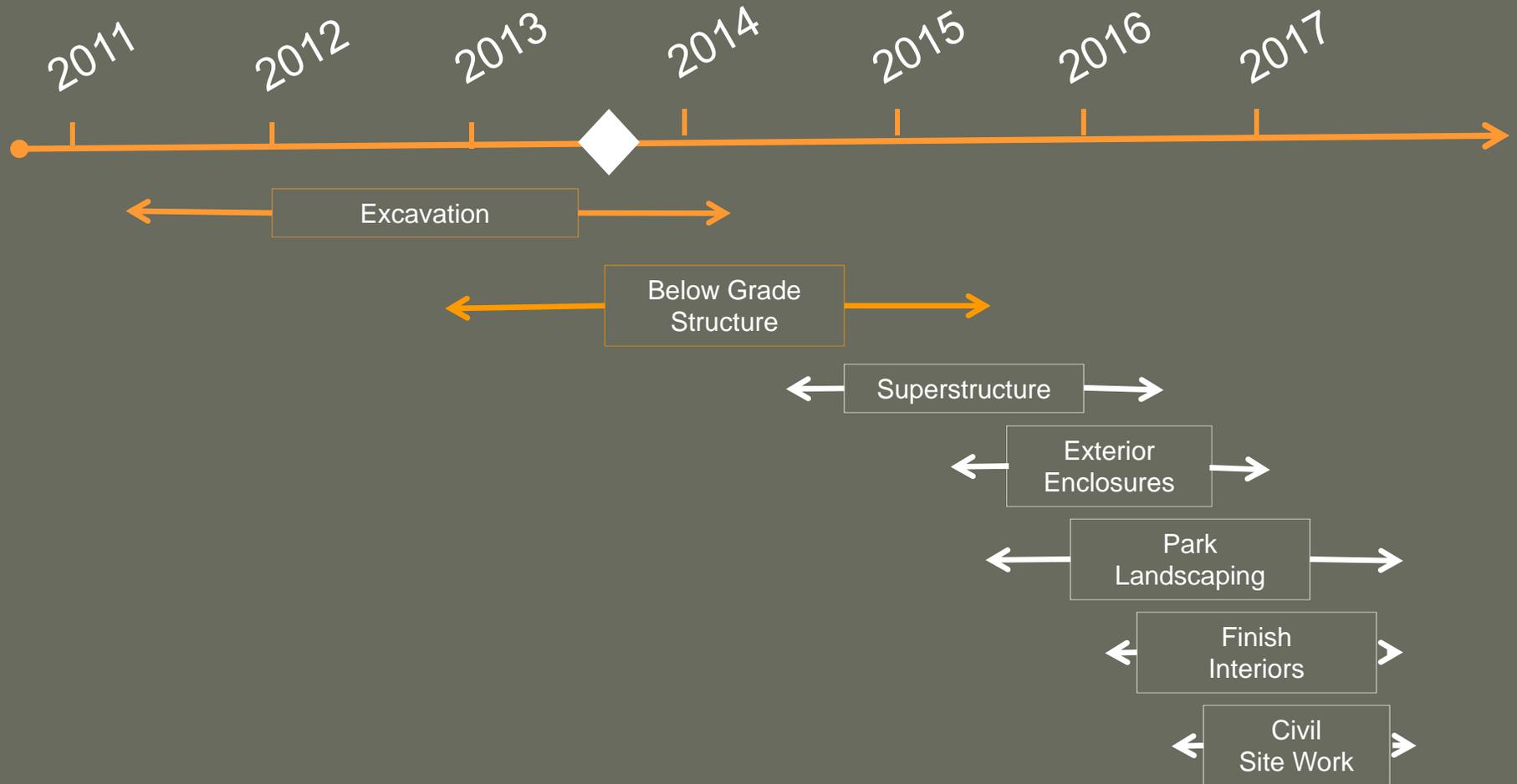
Construction The Next 90 Days

- Next 30 Days (September)
 - Continue Zone 1 waterproofing and protection slab install.
 - Start Zone 2 waterproofing and protection slab install.
 - Install reinforcing steel, prep and place first Structural Mat Slab section in northwest corner of Zone 1 (Area #3).
 - Install Reinforcing, prep and place Structural Mat Slab in southwest corner of Zone 1 (Area #1).
 - Start Cast Node fabrication.
- In 60 Days (October)
 - Install Beale St. PG&E duct bank under traffic bridge.
 - Complete Level B bracing in Zone 4.
 - Complete Structural Mat Slab pour in Zone 1, Area #2.
- In 90 Days (November)
 - Start Zone 4 Level C Bracing.
 - Complete demolition of Buttress “tops” through Level 4.
 - Continue Structural Mat Slab pours in Zone 1, Areas #4 and #7.



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Construction Timeline Summary





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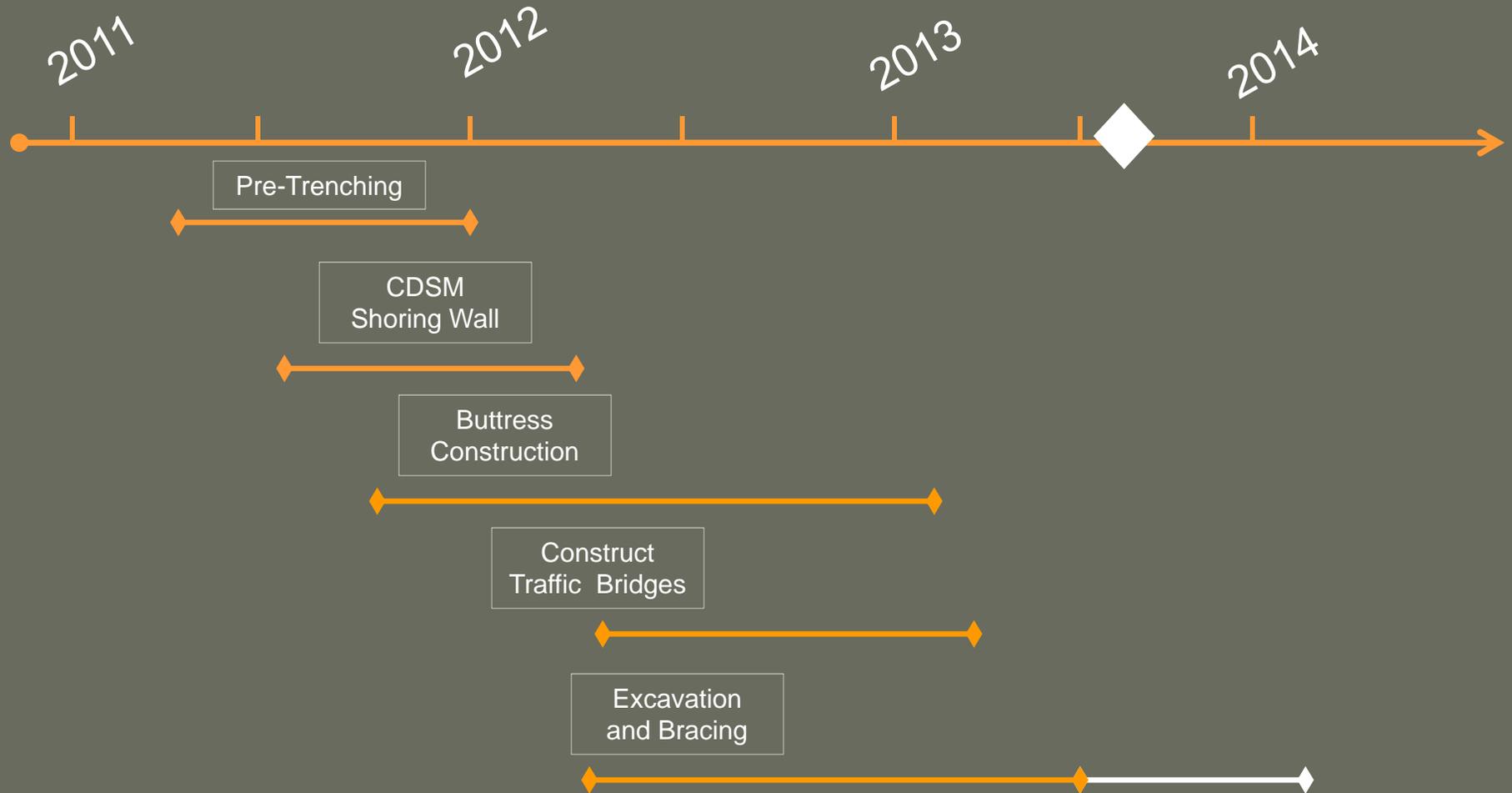
Construction Milestones

Key Schedule Dates	Baseline	Jul-13	Float
Complete Utility Relocations	Jul-13	Jan-14	933
Complete First Mat Pour	Jul-13	Sep-13	0
Complete Zone 2 Mat Pour	Aug-13	Nov-13	13
Complete Excavation	Jan-14	Mar-14	18
Complete Zone 1 Concourse Level Deck	Mar-14	Jul-14	22
Begin Steel Erection	Jun-14	Jul-14	0
Complete Steel Superstructure	Nov-15	Nov-15	0
Connect Bus Ramps to Transit Center	May-16	Oct-15	320
Complete Rough Interiors	Aug-16	Jan-17	37
Complete Exterior Curtain Wall	Jan-17	Feb-17	7
Complete Finish Interiors	Jul-17	Sep-17	21
Begin Bus Operations	Oct-17	Oct-17	0
Final Completion	Mar-18	Jan-18	0



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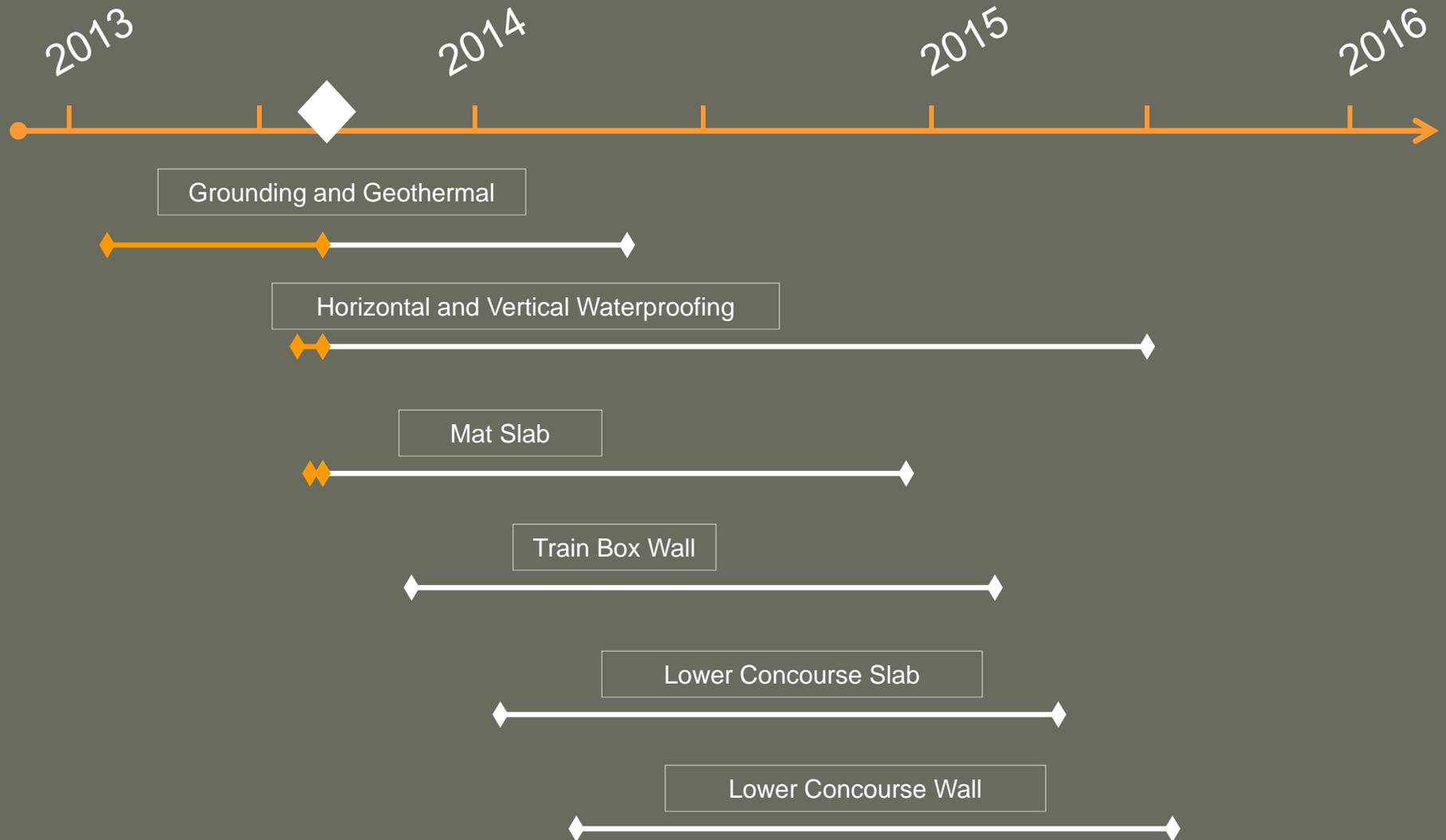
BSE Timeline Summary





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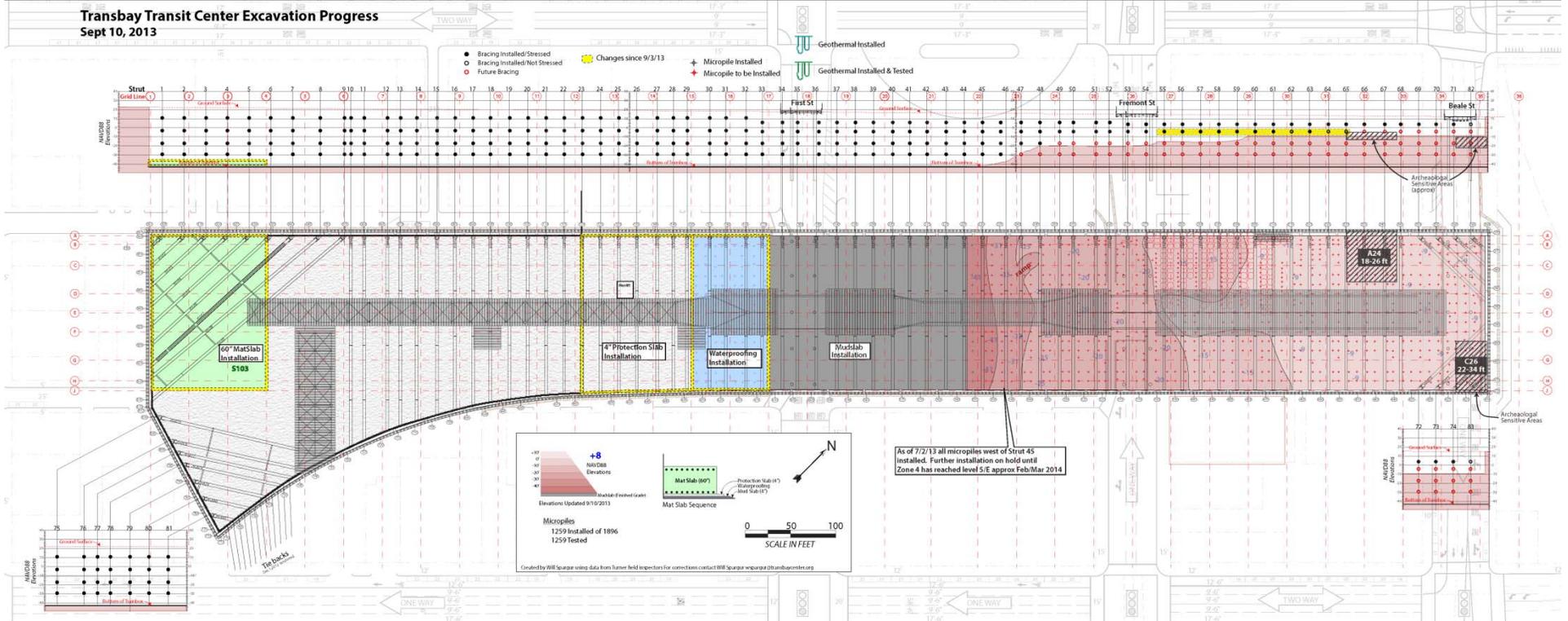
Below Grade Concrete Timeline Summary





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Excavation and Bracing Status All Zones September 10, 2013





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Central and West Sections Progress



July 2013



September 2013



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Micropile Status through July 31, 2013*

Micropiles	Total	Installed	% Installed	Tested	% Tested
Zone 1	664	664	100%	664	100%
Zone 2	429	429	100%	429	100%
Zone 3	313	166	53%	166	53%
Zone 4	490	0	0%	0	0%
Overall	1896	1259	66%	1259	66%

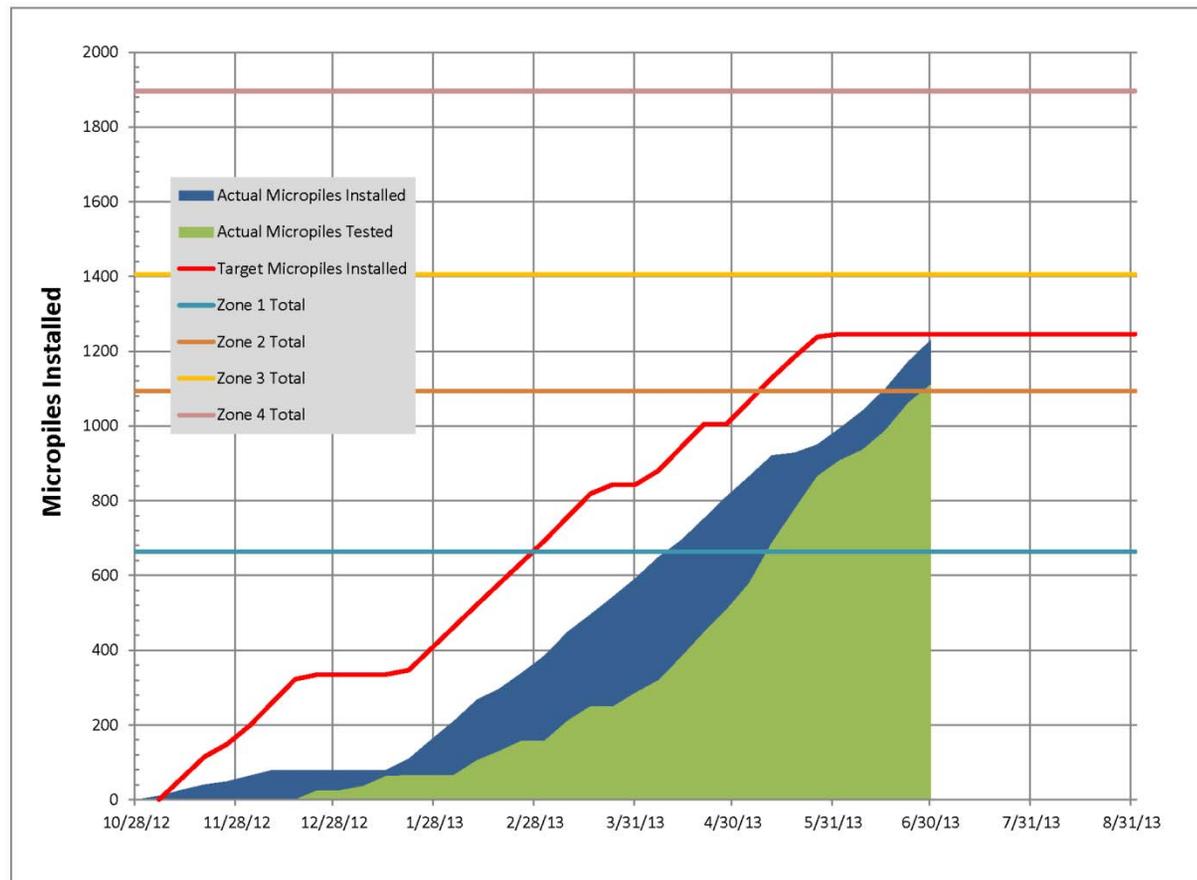
* Micropile operation was demobilized on July 24, 2013. Will return pending completion of excavation.



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Micropile Status

Micropile Installation Production



Date: 7/10/2013



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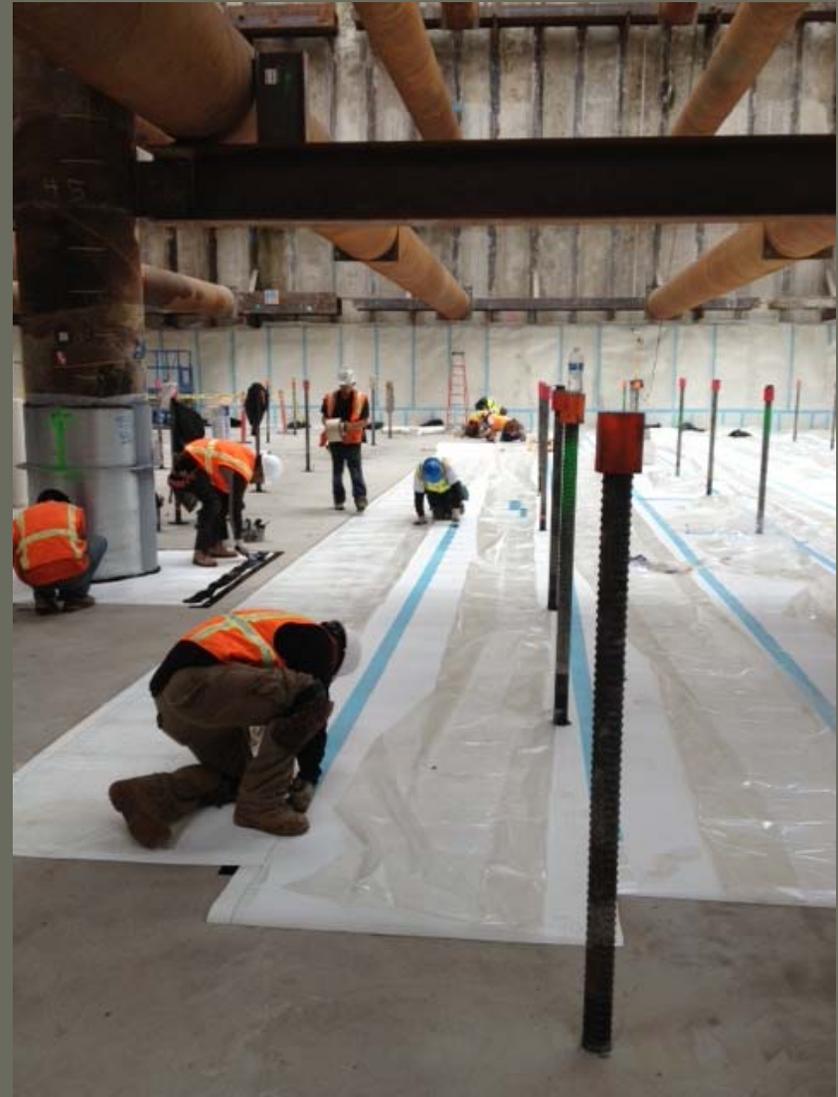
Waterproofing Zones 1 and 2





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Waterproofing Zones 1 and 2





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Protection Slab – Zones 1 and 2





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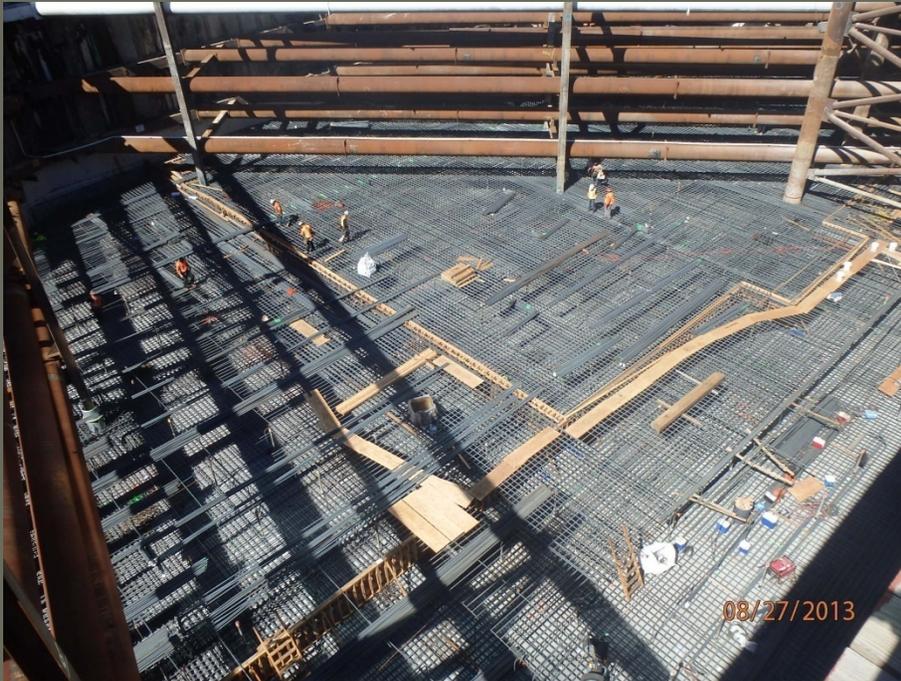
Protection Slab – Zones 1 and 2





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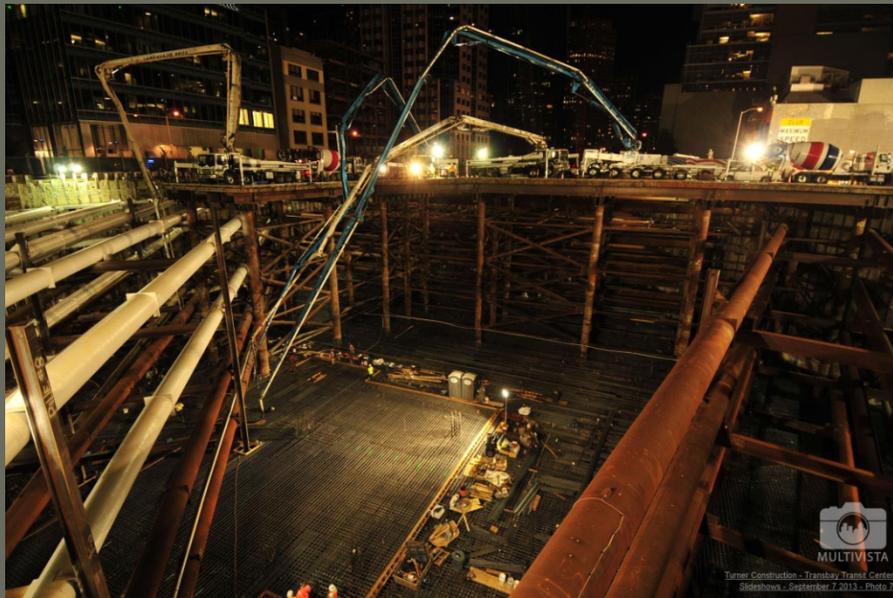
Mat Foundation Slab Preparation – Zone 1





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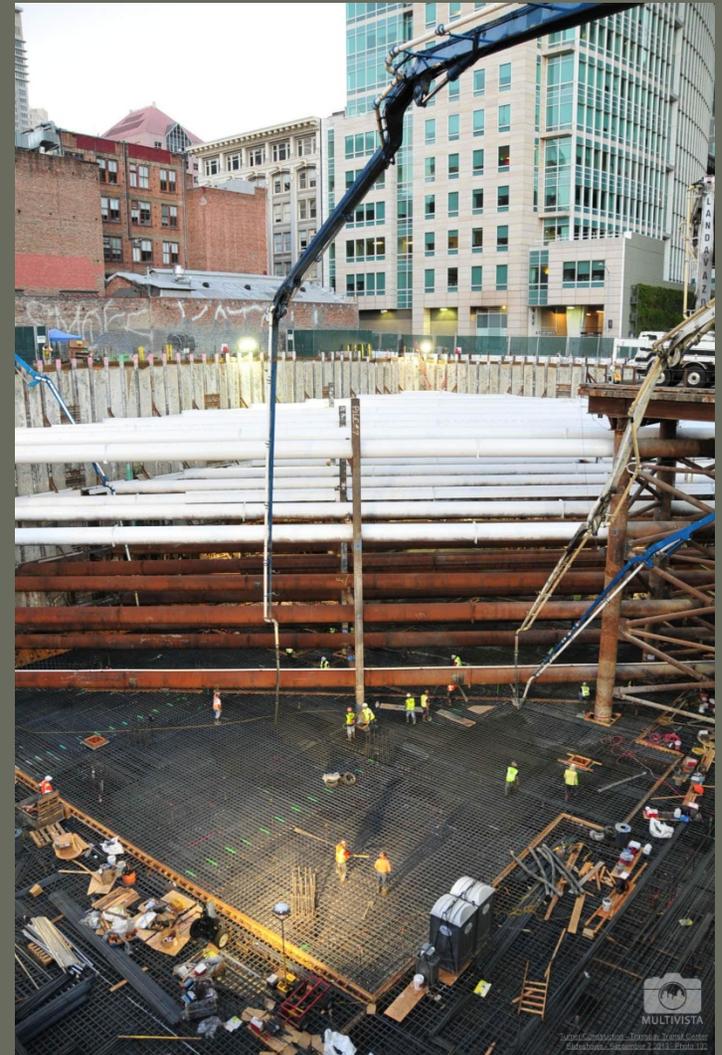
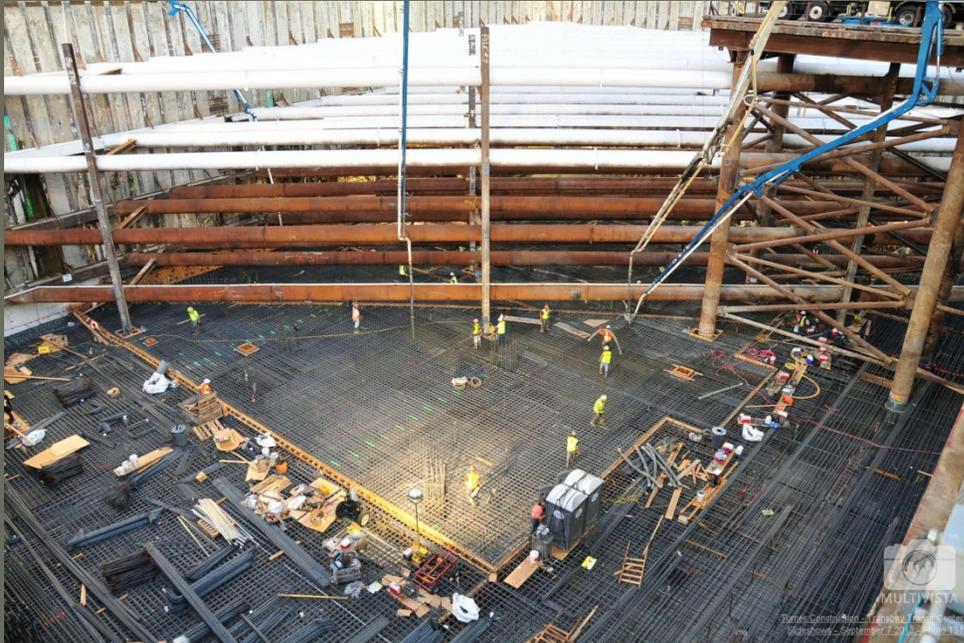
Mat Foundation Slab Placement – Zone 1





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Mat Foundation Slab Placement – Zone 1





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Grounding and Geothermal – Zones 2 and 3





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Grounding and Geothermal – Zones 2 and 3





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Subgrade and Mudslab – Zones 2 and 3





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Subgrade and Mudslab – Zones 2 and 3



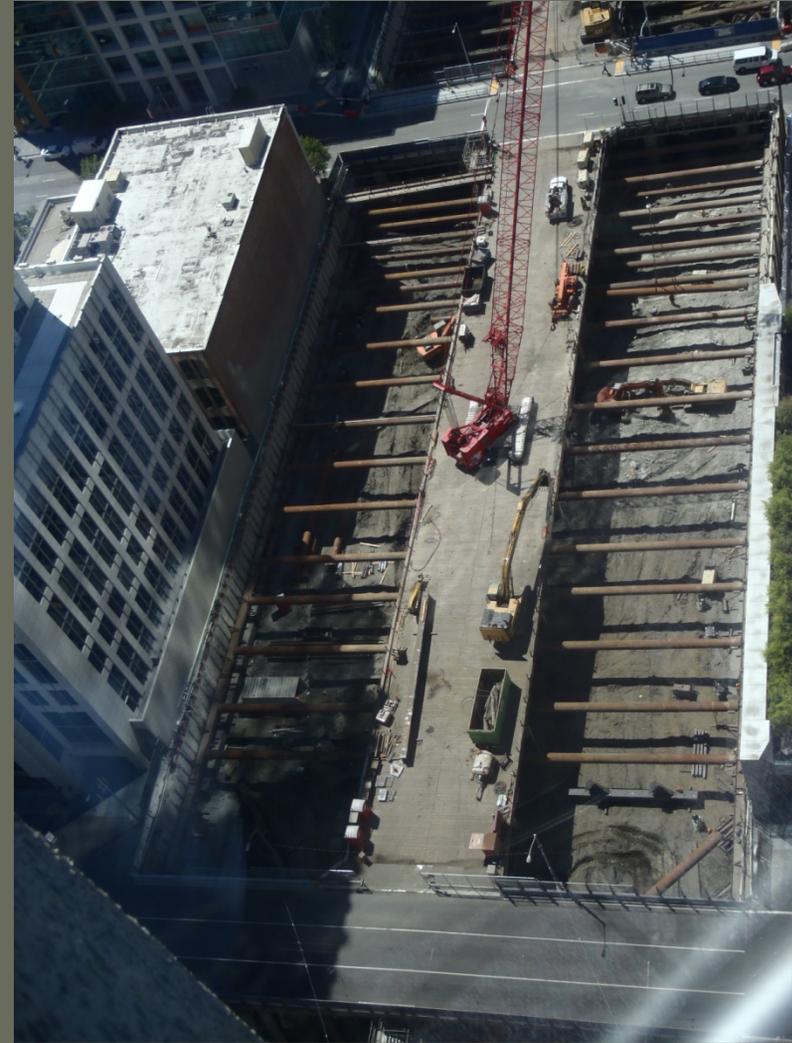


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East Section Progress



July 2013



September 2013



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Excavation and Bracing – Zones 3 and 4





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Excavation and Bracing – Zones 3 and 4





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Utility Relocation - AWSS Installation Update





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Special Event





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Contingency Tracking

(\$millions)

Trend	Design Contingency	Construction Contingency	CM/GC Contingency	Program Reserve	Escalation	Total Contingency & Reserve
Revised Baseline Budget Amounts	\$8.2	\$62.4	\$36.4	\$87.5	\$30.3	\$224.8
Utility Relocation Change Orders				\$0.15		
BSE Change Orders		(\$2.2)				
Below Grade Change Orders		(\$0.06)				
Design Budget Changes (Cast Connex)				(\$0.21)		
Total Draws	\$0	(\$2.23)	\$0	(\$0.195)	\$0	(\$2.42)
Remaining Balances	\$8.2	\$60.2	\$36.4	\$87.3	\$30.3	\$222.4



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Bay Area Regional Labor Breakdown

Labor by Area	Through August 2013	
Location	Total Hours Completed	Hours Percent
East Bay (Alameda, Contra Costa, Solano)	266,178	32%
North Bay (Marin, Napa, Sonoma)	25,694	3%
South Bay (San Mateo, Santa Clara)	82,166	10%
San Francisco	152,295	18%
Other*	311,463	37%
Totals	837,796**	100%

*Other includes workers from throughout California including the Central Valley as well as workers from out of state who are onsite for specific tasks.

**Total hours are for the Transit Center construction work and do not include the initial Demolition work represented by a total of approximately 55,000 craft hours.



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Labor Breakdown by Trade through August 2013

Classification	TTC Building and RUP's*
Inspectors – Soils / Material Test	39
Carpenters and Related Trades	43
Cement Mason	41
Electrical – Utility Lineman	26
Electrician	25
Field Surveyor	26
Iron Worker	122
Laborer and Related Trades	521
Operating Engineer	310
Pile Drivers	125
Plumber	6
Rofer and Waterproofer	24
Sheet Metal	5
Teamsters	166
Tile Setters / Finishers	7
Water Well Driller	9
Totals	1,495

* Relocation of Utilities Project



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Questions?